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ABSTRACT

The study explores the psychological and sociological characteristics of two groups of women: those who choose careers in stereotypic masculine occupations versus those who elect careers in stereotypic feminine fields such as teaching, nursing, social work, counseling, homemaking, library, and secretarial work. The sample consisted of 1646 upperclass college women who had the time and opportunity to develop reasonably firm career goals but had not undergone many goal modifications due to various external circumstances, e.g. marriage or children. Of the total sample, just 109 expressed career aspirations in nontraditional fields. Results suggest that women perceive a narrow range of career possibilities because they are fearful of venturing into a man's world; in addition, higher education has done little to expand women's awareness or interests beyond the sex stereotyped career roles. The author references other studies which indicate that counselors in higher education are ineffective in dealing with women students who are considering male-dominated careers. References are included. (Author/SES)

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WOMEN: PERSONAL AND ENVIRONMENTAL FACTORS IN CAREER CHOICE*

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Introduction*

President Charles Hitch of the University of California recently issued a statement requesting that women be employed, whenever feasible, in the academic community of the university system. Apparently, leaders of the academic and the business world have become cognizant of the constraints imposed upon women by our tradition bound, sex-defined career roles; constraints which "disqualify" women in a wide array of occupational fields. Although these constraints are usually associated with external societal prejudice, many women seem to have internalized, or accepted the concept of limited female capacity in a male oriented career world. Others, however, have resisted. This study attempts to determine the dynamics underlying the differences between the two types of women.

It is a study designed to explore the psychological and sociological characteristics of those who choose careers in stereotypic masculine occupations versus those who elect careers in stereotypic feminine fields. The former include: mathematics, natural and physical sciences, pharmacy, medicine, law, architecture, government administration, politics, engineering, and business administration. The latter, stereotypic feminine careers, include: teaching, nursing, social work, counseling, homemaking, library and secretarial work Women's Bureau, 1967a).

*This paper is based on selected portions of Women: Personal and Environmental Factors in Role Identification and Career Choice. (Unpublished doctoral dissertation, University of California, Los Angeles, 1972).

Methodology

Sample

Original study. Between the fall of 1968 and the winter of 1969, C. Robert Pace and James W. Trent conducted a survey of freshmen, upperclassmen, and alumni in some 90 institutions of higher education throughout the United States. In this original study, each institution was requested to select its own sample of respondents randomly and in each case the investigators verified the manner of selection. Sampling methods varied from school to school. In some institutions, tables of random numbers were used to select students from the registration roster; in others selection was accomplished by classroom enrollment.

Present study. The investigator of the present study utilized return questionnaires of the original study to examine data pertaining to women's career choices and their psychological, sociological, and educational backgrounds and experiences. Questionnaires from approximately half of the schools used in the larger study were randomly selected for the present study.

The sample of respondents consists entirely of upperclassman women. A variety of factors led to the decision to focus on upperclassmen rather than freshmen or alumni. To study psychological variables as they relate to career choice, it was deemed preferable to select subjects representative of those who 1) would have had time and the opportunity to develop some reasonably firm career goals, and 2) would not yet have undergone many goal modifications in accommodating various external circumstances (e.g., marriage, children, finances). In terms of these criteria, the upperclassman seemed most appropriate.

Within the upperclassman group, the sample was divided into two categories. The first consisted of women who indicated, in response to a questionnaire item, that they were aspiring to careers in occupational fields where women represent the large majority of the work force. Women in this category are called "traditionals." The other category consisted of women whose goals were in fields where women represent a small minority of the work force. They are called "non-traditionalists." (Frequency tabulations of men and women employees within the occupational spectrum were found in Women's Bureau, 1967b).

Of the 1646 woman upperclassmen respondents in the 38 schools in the study, only 109 expressed career aspirations in non-traditional fields. These respondents comprised the "non-traditional" sample. The remaining group of 1537 respondents, the "traditionals," was reduced to 360 to effect a more manageable balance between the two comparison groups. This reduction was accomplished by randomly selecting 45 upperclassmen from each of the eight school categories. Because data processing revealed some unusable questionnaires with incomplete or no responses on critical variables, the sample was further pared, leaving a total of 101 "non-traditionals" and 321 "traditionals."

Measurement

The College Student Survey, developed by Pace and Trent for their research on institutions of higher education, supplies the data for the questions in the present study. A number of variables were available from the survey instrument which were pertinent to the present study. They represent part of a woman's complex of values and attitudes, aptitudes and experiences which influence and are influenced by her own unique life style.

Discussion and Results

Career Choices

The first task in preparation for analysis of the data was to establish the two criterion groups--upperclassman women aspiring to either traditional or non-traditional types of careers for women. One item on the College Student Survey supplied information regarding career aspirations. In response to the question, "After you finish college or graduate school, do you know what kind of job you want or expect to have?", those who answered "yes" were asked to write their career goals. Answers to this open-ended item were categorized as shown in Table 1. The distribution of career choices among women in the sample was the most potent evidence that women's occupational aspirations are influenced by other than chance factors. Among 1646 women upperclassmen in colleges throughout the country, less than six percent aspired to non-stereotypic feminine careers; and half of the remaining 94 percent were preparing for teaching positions.

Background Characteristics

To learn what background features were related to women's career choices, an analysis was made of the differences between "traditional" and "non-traditional" groups in socioeconomic status and religious background. The intent of the socioeconomic questions was to discover 1) if financial well-being is a contributing factor to future career decisions, 2) if the educational attainments of one's mother and father are associated with one's own career decisions, and 3) if parents' interest in intellectual matters, as measured by the number of books in the home, is related to the choice a woman makes about the kind of career she wants.

Table 1

Career Aspirations of 1646 Upperclassman Women
Students in 38 Colleges Throughout the United States

Traditional Careers	Number	Percent
Teacher	803	52
Counselor, social worker	94	5.7
Nurse or other health worker (lab technician and other medical technologist)	77	4.6
Librarian	28	1.7
Housewife	10	.6
Other	211	12.8
Total	1223	74.4
Don't know	314	19.0
Non-traditional Careers		
Scientist (physicist, chemist, meteorologist, oceanographer)	20	1.0
Clinical psychologist	15	.7
Physician	14	.7
Lawyer	11	.5
Government executive or politician	10	.5
Computer specialist	7	.4
Pharmacist	6	.3
Engineer	3	.2
Certified public accountant	3	.2
Business executive	3	.2
Mathematician	3	.2
Dentist	1	.08
Bank president	1	.08
Veterinarian	1	.08
Total	109	6.60
Grand Total	1646	100

Socioeconomic status. The socioeconomic status score was computed from a composite of five variables--parents' income, mother's and father's educational level, the number of books in the parents' home, and the father's occupational level. The difference between the two groups on the total socioeconomic status score was statistically significant, with the "non-traditionals" scoring higher than the "traditionals" (Table 2). The "non-traditionals" obtained higher scores on all of the SES components. However, of the five separate components, only two, mother's educational level and parents' income level were significantly different.

Religious background. The assumption underlying the analysis of differential religious backgrounds rests on the belief that religious experience, as one of the many environmental stimuli of early childhood, can influence one's role development, which, in turn, might affect the type of career one chooses. According to the data, some significant relationships do exist between religion and type of career choice. Catholic women predominately aspired to traditional careers, and Protestant women somewhat less so; Jewish women aspired to non-traditional careers. Of the Catholics, 84.7 percent chose traditional and 15.3 percent chose non-traditional careers; among the Protestants, 79.2 percent were aiming for traditional careers, while 20.8 percent aspired to non-traditional careers; among the Jews, 36.4 percent chose traditional and 63.6 percent chose non-traditional careers.

Personality Characteristics

By asking respondents to check items about what they like and how they see themselves, the researcher can identify some aspects of "self" concept. In this study, "self" is most directly revealed by the Personal Traits measure which consists of two check lists--one headed "I generally like," followed by two or three word descriptions of people and activities

Table 2

Socioeconomic Variables Comparing
"Traditionals" and "Non-Traditionals"

SES variables and groups	Mean	df	t	p
Father's educational level				
Traditional	3.76	420	1.38	n.s.
Non-traditional	4.10			
Mother's educational level				
Traditional	3.56	420	2.73	.007
Non-traditional	4.03			
Number of books in home				
Traditional	3.05	420	.95	n.s.
Non-traditional	3.44			
Parents' income				
Traditional	2.80	420	2.46	.01
Non-traditional	3.21			
Father's occupation				
Traditional	5.55	420	.58	n.s.
Non-traditional	5.73			
Total SES				
Traditional	18.9	420	2.13	.03
Non-traditional	20.5			

such as practical, determined, social, open-minded, etc., and the other, "I am," followed by a list of adjectives. Table 3 shows the personality variables which differentiated significantly between groups.

Regression of all variables

By submitting the variables in the survey instrument to a stepwise multiple regression analysis, it was possible to produce a list of variables which, within limits of available data, define the role of women belonging to at least one of the criterion groups.

Theoretical Orientation, describing a propensity for logical, analytical thinking, (from the Personal Traits scale) was the strongest predictor in the multiple regression analysis, followed by two individual items -- grade average in college and "I like science and mathematics." Table 4 shows higher Beta values (normalized regression coefficients) for the two latter items than for Theoretical Orientation, but this is an indication of their strong relationship with the dependent variable, and not necessarily of a stronger predictive value in terms of probable change in the dependent variable.

Following "I like science and mathematics" in order of predictive value were: liberal viewpoints regarding women's role in society, certainty of future job choice, discussing academic problems with faculty, and the self description, "I am analytical." All of the above (including higher grade averages in college) were more descriptive of the "non-traditionals" than the "traditionals."

Other variables, such as vocabulary, religion, and socioeconomic status, which differentiated significantly on *t* tests and chi-square analyses evidently do not have the predictive value of the above seven.

Table 3

Personal Traits Showing Significant Differences by Chi-square Analysis, and the Sub-scales to which They Belong (in parentheses)

Sub-scales* and Items	% positive responses in each group		df	x^2	p
	Trad.	N. -Trad.			
I generally am:					
Well organized** (C)	43.9	62.4	1	9.7	.01
Individualistic (C)	58.3	70.3	1	4.1	.05
Questioning (C)	59.12	71.3	1	4.2	.05
Predictable** (C)	29.9	18.8	1	4.2	.05
Determined** (A)	61.7	72.3	1	3.3	.10
Undistracted** (TO)	3.1	14.9	1	16.93	.001
Analytical (TO)	24.0	56.4	1	35.84	.001
Critical-minded (TO)	36.1	53.5	1	8.88	.01
Scientific (TO)	10.9	45.4	1	57.22	.001
Sociable** (TO)	77.9	62.4	1	8.8	.01
I Generally like:					
Original research work (TO)	40.5	61.4	1	12.68	.01
Solving long, complex problems (TO)	22.1	37.6	1	8.84	.01
Critical considerations of theories (TO)	31.5	45.5	1	6.10	.02
Science and mathematics (TO)	18.4	49.5	1	37.24	.001
Discovering how things work (TO)	53.6	70.3	1	8.11	.01
Scientific displays (TO)	15.0	36.6	1	21.12	.001
Detecting faulty reasoning (TO)	34.9	64.4	1	26.19	.001

*C = Complexity, A = Autonomy, TO = Theoretical Orientation
**An answer of "false" on these items contributes to a higher score on the respective scales.

Table 4

Variables of Predictability on Criterion, Career Orientation, as Determined by a Stepwise Multiple Regression Analysis

Variable	% of Variance (R square)	Beta	Standard Error	F*
Theoretical Orientation scale	.12	.11	.01	4.05
College grade average	.15	.17	.02	13.72
I like science and mathematics	.18	.21	.05	17.80
Viewpoints regarding the role of Women in society	.21	.14	.02	9.85
Certainty of future job choice	.22	.13	.03	8.94
Requesting faculty help with academic problems	.23	.10	.04	5.38
Self-description: I am analytical	.24	.11	.05	4.76

*All F values significant at .01 or better.

When all the variables were entered into the multiple regression equation, however, only approximately 29 percent of the variance was accounted for. One obvious implication is that other variables, not included in this study, would improve the predictability of career choice, and the need for further research in this area is apparent.

Major Group Differences

A brief summary of major group comparisons indicates that women with non-stereotypic aspirations: 1) come from homes with a higher income, 2) have mothers who have reached higher levels of education, 3) are more theoretically oriented (i.e., have a propensity for logical, analytical and critical thinking), 4) hold more liberal attitudes toward the role of women in society, and toward international relations among governments, 5) are higher achieving students, 6) express a stronger liking for science and mathematics, 7) maintain higher academic records in college, 8) tend to have more communication with members of the faculty insofar as the academic and vocational aspects of their lives are concerned, 9) see their college experiences more in terms of vocational and liberal education benefits, 10) participate in college to a greater degree in social service and academically oriented activities, and 11) are less involved in artistically creative activities such as creative writing, dance, art, theatre, and music. In reference to religious background, approximately two-thirds of those from Jewish homes, one-fifth of those from Protestant homes, and one-seventh of those from Catholic background were "non-traditionals."

Conclusions and Recommendations

The assumptions underlying this study are that career choices are largely a function of learned roles. In respect to the role learning process, education would seem to have some responsibility. Apparently, however, the educational system in this country has done little to expand women's awareness or interests beyond the sex stereotyped career roles revealed by the data.

Although the study found differences between traditional and non-traditional aspirants, there were no data signifying that women in the traditional group would be less able to perform in non-traditional occupations, and it is suggested that their choices have been powerfully influenced by their role expectations, as is true among other sub-groups in our society. Women seem willing, if not to cherish, at least to accept a position of occupational inferiority.

The point here is not to downgrade the position of teacher or others in the traditional category. The point is rather to suggest that women perceive a narrow range of career possibilities because they are fearful of venturing into a man's world, frequently doubting their capacity to fill masculine typed positions. It is also apparent that higher education evidently has little or no effect in changing the situation.

What, if any, are the implications for the higher education process and for college counseling to be gleaned from a composite of the foregoing information? There is sufficient documentation, as indicated in the following studies, that counselors are ineffective in dealing with women students who are considering the pursuit of male-dominated

careers. Non-traditional career aspirants in the present sample requested assistance from counselors with vocational plans significantly less than women of the traditional career group. This may be a function only of the relative degree of certainty about future career goals between the groups. It may also, however, mean that women who plan to enter male dominated fields experience less satisfaction from their encounters with counselors.

Although the question cannot be clarified here, as there are no data regarding satisfaction with counseling services, other studies of career counseling indicate a stereotyped approach to women students, particularly among male counselors (Farmer, 1971). More specifically, Thomas (1967) studied the reactions of women and men counselors with female clients holding traditional feminine career goals and those holding non-traditional career goals. He observed that all, but particularly male, counselors perceived the traditional feminine goals as more appropriate.

While there is no reason to assume that counselors should be more free of stereotypes than any other member of society, the extent of influence they bring into play is a sufficiently important factor to warrant a heightened awareness of and special attention to parochial attitudes. This is not to say that counselors indiscriminately should encourage female clients to pursue occupational plans which present difficult obstacles. Jobs do exist which are closed to female applicants, or to which women have not been welcome. The female client needs to be informed that race tracks do not, as a rule, hire women jockeys, nor do large industries open their doors to female executives; and airlines do not employ women as pilots. The client should understand that, while she is free to pursue a career within as large a range of alternatives as she wishes, it may be impossible to find employment in areas foreign to females. But the choice should be hers, free from a counselor's

perception of her feminine limitations or from any rigid determination of what is "appropriate" for women. Limitations based on role expectations--age, color, sex--are pernicious; and counselors, when dealing with the client who does not conform to a role model, must examine their conscious biases, and consider the possibility of unconscious ones.

An even more insidious problem than the counselor (for, usually, the latter deals only incipiently with career goals) is posed by administrators and faculty of institutions of higher education. Admissions, hiring, promotions, and tenure practices are all under attack by women within and outside of academia who are ending their acquiescence to second class status on the campus. Female students and faculty are demanding child care centers, flexible scheduling for mothers, and a complete revamping of history, psychology, and philosophy curricula. Cognizant of the perpetuation of stereotypic femininity in text books, lectures, and course outlines, faculty women are seeking to provide alternative ways of looking at women in a society which has remained unmitigatedly prejudiced toward half the population. They are concerned that young college women have few female examples to follow, and so continue to accept a "conventional wisdom" that places women in an inferior position to men--intellectually, academically, and vocationally.

If our society were to evolve toward Rossi's (1964) ideal of androgynous sex roles, these considerations would become as vital to men as they are now to women. For the present, however, sex status appears to be a salient factor in a woman's professional career, and too often she is expected (by herself as well as others) to subordinate her individualistic goals to those of her husband and family. In the words of Kluckhohn (1954), woman's role is still devoted to things "aesthetic and moral which busy men define as the nice but non-essential embroidery of American life."

REFERENCES*

Astin, H. Career development of girls during high school years. Journal of Counseling Psychology, 1968, 15, 536-40.

Astin, H. The women doctorates in America. New York: Russell Sage Foundation, 1969.

Baroff, D. Campus, U.S.A.. New York: Harper, 1960.

Barnette, R. Vocational planning of college women: A psycho-social study. Proceedings of the 75th Annual Convention of the American Psychological Association, 1967, 2, 345-346.

Bereiter, C., & Freedman, M. Fields of study and the people in them. In N. Sanford (Ed.), The American College. New York: Wiley, 1962.

Brown, D.R. Some educational patterns. Journal of Social Issues, 1956, 12, 44-60.

Brown, D.R. Personality, college environment, and academic productivity. In N. Sanford (Ed.), The American College, New York: Wiley, 1962.

de Beauvior, S. The Second Sex, New York: Alfred A. Knopf, 1953.

Denmak, F., & Guttentag, M. Dissonance in the self concepts and educational concepts of college and non-college oriented women. Journal of Counseling Psychology, 1967, 14(2), 113-115.

Deutsch, H. The psychology of women, psychoanalytic interpretation. New York: Grune & Stratton, 1945.

Douvan, E., & Adelson, J. The adolescent experience. New York: Wiley, 1966.

Elton, C., & Rose, H. Significance of personality in the vocational choice of college women. Journal of Counseling Psychology, 1967, 14, 293-298.

Epstein, C. Encountering the male establishment: Sex status limits on women's careers in the professions. American Journal of Sociology, 1969, 75, 965-982.

Erikson, E. Inner and outer space: Reflections on womanhood. Daedalus, 1964, 93, 582-606.

*This list of references represents the total list of references from the dissertation from which this paper was derived.

Fand, A.B. Sex role and self concept. Unpublished doctoral dissertation, Cornell University, 1955.

Farmer, H. Helping women to resolve the home-career conflict. Personnel and Guidance Journal, June 1971, 49(10), 795-801.

Faunce, S. Personality characteristics and vocational interests related to the college persistence of academically gifted women. Minneapolis: University of Minnesota, 1966.

Feldman, K., & Newcomb, T. The impact of college on students. San Francisco: Jossey-Bass, 1969.

Fisher, E. The second sex, junior division. New York Times Book Review, May 1969, 74, 6-44.

Foster, R.B., & Wilson, P.P. Women after college. New York: Columbia University Press, 1942.

Freedman, M.B. Measurement and evaluation of change in college women. (USHEW Project No. 736). Poughkeepsie, N.Y.: Mellon Foundation, Vassar College, 1961.

Friedan, B. The feminine mystique. New York: Dell, 1963.

Fromm, E. Sex and character. Psychiatry, 1943, 6, 21-31.

Ginzberg, E. Life styles of educated women. New York: Columbia University Press, 1966.

Gurin, M., Nachmann, B., & Segal, S. The effect of the social context in the vocational counseling of college women. Journal of Counseling Psychology, 1963, 10, 28-33.

Gysbers, N., Johnston, J., & Gust, T. Characteristics of homemaker and career oriented women. Journal of Counseling Psychology, 1968, 15(6), 541-546.

Harris, A.S. The second sex in academe. AAUP Bulletin, Fall 1970, 283-295.

Haveman, E., & West, P. They went to college. New York: Harcourt, Brace, 1952.

Hawley, M.J. The relationship of women's perception of men's views of the feminine ideal to career choice. Dissertation abstract, Clarmont Graduate School and University Center, 1968.

Heilbrun, A. Parental identification and the patterning of vocational interests in college males and females. Journal of Counseling Psychology, 1969, 16(4), 342-47.

Heist, P. A commentary on the motivation and education of college women. Journal of the National Association of Women Deans and Counselors, 1962, 25, 51-59.

Heist, P., & Yonge, G. Omnibus Personality Inventory Manual. New York: Psychological Corporation, 1968.

Homer, M. Woman's will to fail. Psychology Today, Nov. 1969, 36.

Horney, K. New ways in psychoanalysis. New York: W.W. Norton & Co., 1939.

Hoyt, D.P., & Kennedy, C.E. Interests and personality correlates of career-motivated and homemaking-motivated college women. Journal of Counseling Psychology, 1958, 5, 44-49.

Hunt, M. Her infinite variety. New York: Harper & Row, 1963.

Kaplan, H. Women physicians. New Physician, June 1971, 20(1), 11-19.

Katz, J., et al. No time for youth. San Francisco, California: Jossey-Bass, 1969.

Kidd, V. Now you see, said Mark. New York Review of Books, Sept. 3, 1970, 15, 35-37.

Kluckhohn, R. Dominant and variant value orientation. In Personality in nature, society, and culture. New York: Alfred A. Knopf, 1954.

Komarovsky, M. Cultural contradictions and sex roles. American Journal of Sociology, 1946, 52, 184-189.

Life Magazine, Dec. 4, 1970.

Maccoby, E. Woman's intellect. In Farber, Seymour, & Wilson (Eds.), Man and civilization: The potential of woman. New York: McGraw-Hill, 1963.

Mashih, L. Career saliency and its relation to certain needs, interests, and job values. Personnel and Guidance Journal, 1967, 45(7), 653-658.

McClelland, D.C. Talent and society: New perspectives in the identification of talent. Princeton, N.J.: D. Van Nostrand, 1958.

Orden, S.R., & Bradburn, N.M. Working wives and marriage happiness. American Journal of Sociology, Jan. 1969, 74(4), 392-407.

Pace, C.R. College and university environmental scales: Second technical manual, institutional research program for higher education. Princeton, N.J.: Educational Testing Service, 1969.

Rezler, A. Characteristics of high school girls choosing traditional or pioneer vocations. Personnel and Guidance Journal, 1967, 45(7), 659-665.

Rose, A.M. The adequacy of women's expectations for adult roles. Social Forces, 1951, 30, 69-77.

Rossi, A. Equality between the sexes: An immodest proposal. Daedalus, 1964, 93, 607-652.

Rychlak, J., & Legerski, A. A sociocultural theory of appropriate sexual role identification and level of personal adjustment. Journal of Personality, 1967, 35(1), 31-49.

Sarbin, T. Role theory. In G. Lindzey (Ed.), Handbook of social psychology. Reading, Mass.: Addison Wesley, 1954, 1, 42-85.

Schleyer, M. Personal communication, 1972.

Sedlacek, C. Selected factors affecting certainty and persistence of vocational choice for college women. Dissertation abstract, University of North Dakota, 1968.

Shosteck, R. Five thousand women college graduates report. Washington, D.C.: B'nai B'rith Vocational Service Bureau, 1953.

Steinmann, A. A study of the concept of the feminine role of fifty-one middle class American families. Genetic Psychology Monographs, 1963, 67, 275-352.

Strahl, G.T. The relationship of centrality of occupational choice to sex, parental identification, and socioeconomic level in university undergraduate students. Dissertation abstract, Michigan State University, 1967.

Super, D. The psychology of careers: An introduction to vocational development. New York: Harrper & Brothers.

Surette, R. Career vs. homemaking: Perspective and proposals. Vocational Guidance Quarterly, Dec. 1967, 16(2), 82-86.

Thomas, A.H. Counselor response to divergent vocational goals of a female client in terms of acceptance appropriateness and need for further counseling. Unpublished doctoral dissertation, Michigan State University, 1967.

Thompson, C. Cultural pressures in the psychology of women. In P. Mullahy (Ed.), A study of interpersonal relations. New York: Hermitage Press, 1949.

Trecker, J.L. Woman's place in the curriculum. Saturday Review, October 16, 1971, 54, 83-92.

Trent, J.W. Catholics in college: Religious commitment and the intellectual life. Chicago: University Chicago Press, 1967.

Trent, J.W., & Medsker, L.L. Beyond high school. San Francisco: Jossey-Bass, 1968.

U.S. Bureau of the Census. U.S. Census of population: 1960. Detailed characteristics, U.S. summary PC(1) - 1D. Washington, D.C.: Government Printing Office, 1963.

Vetter, L., & Lewis, E. Some correlates of homemaking vs. career preference among college home economics students. Personnel and Guidance Journal, 1964, 42, 593-595.

Watley, D., & Kaplan, R. Career or marriage?: Aspirations and achievements of able young women. Journal of Vocational Behavior, Jan. 1971, 1(1), 29-43.

Webster, H., Freedman, M., & Heist, P. Personality changes in college students. In N. Sanford (Ed.), The American College. New York: Wiley, 1962.

Weinstein, M.R. Psychiatric manpower and women in psychiatry. Journal of Nervous and Mental Diseases, 1967, 145(5), 364-370.

Werts, C. Career choice patterns. Sociology of Education, Fall 1967, 40(4), 348-358.

White, B. The relationship of self concept and parental identification to women's vocational interests. Journal of Counseling Psychology, 1959, 6(3), 202-206.

Williams, P.A. Women in medicine: Some themes and variations. Journal of Medical Education, July 1971, 46(7), 584-591.

Women's Bureau. Fifteen years after college: A study of alumnae of the class of 1945. U.S. Department of Labor, Bulletin 283, Washington, D.C., 1963.

Women's Bureau. Job horizons for college women. U.S. Department of Labor, Bulletin 288, Washington, D.C., 1967. (a)

Women's Bureau. Underutilization of women workers. U.S. Department of Labor, Bulletin. Washington, D.C., 1967. (b)